

REMARKS

The Applicant thanks the Examiner for his comments on the above application and submits herewith amendments we believe overcome the objections raised by the Examiner. In particular, the objection under 35 U.S.C 112 has been overcome by reference to 'said annular sleeve' in the final line of claim 1 which finds antecedent in the annular sleeve recited at line 10.

The Examiner has rejected claim 1 under 35 U.S.C. 102(b) as anticipated by Larkin. The Applicant respectfully disagrees. The Larkin reference shows a variable capacity machine that has a port plate interposed between the barrel and the end plate. As shown in Figure 2, the port plate, which is not numbered, has a pair of oppositely directed faces, one of which seals against the barrel and the other which seals against the end face.

Claim 1 as previously on file recited the provision of an annular sleeve extending between and in sealing engagement with port plate and the other of the barrel and housing. The Examiner has indicated that this feature is to be found in the sleeve 81 shown in Figure 3. The sleeve 81 appears to be the sleeve that extends around the periphery of the barrel and carries the vanes 74 shown in Figure 1. Whilst the sleeve 81 may be an annular sleeve, it does not extend between nor is it in sealing engagement with the port plate and the other of the barrel and housing. There is no indication in the specification that there is any sealing function provided by the sleeve or that its arrangement with respect to the port plate provides such a sealing function. The drawing, as can best be understood, quite clearly shows that the sleeve is simply encompassing the barrel that does not extend across the faces of the port plate nor in any way is described as performing a sealing function. Accordingly, it is believed that claim 1 as previously on file is not taught in the Larkin reference and therefore cannot be anticipated by Larkin.

To further clarify the structure recited in claim 1, minor amendments as to form have been made so as to specify that the sealing face is hydraulically connected to the other barrel in the housing through an annular sleeve. The functional recitation at the end of the claim also makes it clear that fluid is transferred between one of the ports and the cylinders through the annular sleeve.

Claim 13 and claims 19-20 depend upon claim 1 and therefore as claim 1 is not believed to be anticipated, these claims likewise cannot be anticipated.

The Examiner has rejected claims 2, 5-8 and 14-16 under 35 U.S.C. 103(a) as unpatentable over Larkin in view of Kita. As noted above, Larkin does not disclose an annular

sleeve to connect hydraulically a sealing face with the other of the barrel and the housing. The reference to Kita, which was discussed in detail in the reply to the Office Action of December 26th does not disclose this feature. As previously pointed out, Kita does not teach rotating barrel but rather it teaches a rotating shaft and swashplate. There is no disclosure of the annular sleeve amended in the manner recited in claim 1 and in view of the fact that neither Larkin nor Kita disclose this feature, it cannot render claims 2, 5-8 and 14-16 as obvious. The Examiner has pointed to sleeves 41 as constituting the annular sleeve. However because of the fundamentally different nature of the Kita reference to that of the present application, although sleeves 41 are annular, they do not meet the requirement of claim 1.

Claim 1 requires a port plate having a sealing face on one of the barrel and the housing and the sleeve hydraulically connecting the other of the barrel and the housing. In Kita, the sealing face is the face that is engaged by the annular sleeve 41. Therefore there is no secondary connection as required by claim 1, and this is specifically because of the nature of the machine where the Kita reference has a stationary barrel. Because of the difference in characteristics between the machine shown in Larkin and that shown in Kita, the adoption of the teachings of Kita into the teachings of Larkin would not be obvious.

Rather, the arrangement of sealing between the barrel and the housing in Larkin would be taken to be the correct sealing technique and no advantage would be obtained from using the Kita teachings since they relate to a fundamentally different arrangement of components. Isolation of one component from a fundamentally different type of machine for incorporation into another type of machine is clear indication of hindsight based upon the teachings of the present application. As such it is respectfully submitted that combination of Larkin and Kita do not render claims 2, 5-8, 14-16 obvious.

The Examiner has rejected claims 3, 4 and 9-10 on the basis of Larkin, Kita and Takenaka. Whilst Takenaka does disclose a conical spring, there is no disclosure of the annular sleeve used in the manner taught by claim 1 in the type of machine shown in Larkin. Accordingly, Takenaka does not overcome the deficiencies of the combination of Larkin and Kita and as such it is believed that claims 3-4 and 9-10 clearly and patentably distinguish over this combination.

The rejection of claim 12 is based upon the combination of Larkin, Kita, Takenaka and Budzich. Budzich however does not teach what is missing from Larkin and Kita. Therefore it is respectfully submitted that claim 12 cannot be rendered obvious by the additional combination of Budzich.

Claims 21-24 have been rejected under 35 U.S.C. 103(a) as unpatentable over Larkin in view of Kimura. Claims 20-24 depend upon claim 19 that specifies that the barrel is mounted on a shaft extending through the housing and secured thereto by a key. The Larkin reference quite clearly shows in Figure 1 the provision of splines to secure the barrel to the shaft. As noted in the present application at paragraph 73, the key 42 is distinct from the provision of splines and leads to significant advantages in use. Larkin therefore does not disclose a keyed attachment as required by claim 19. Kimura also discloses a spline connection rather than a key and therefore the combination of Larkin and Kimura fails to teach the arrangement of port plate and annular sleeve recited in claim 1 and also fails to teach the mechanical arrangements specifically recited in claim 19. As such, it is believed that the combination relied on by the Examiner to reject claims 20-24 does not render those claims obvious.

Further action leading to allowance of the application is respectfully requested.

Respectfully submitted,

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